

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
DANIEL J SWIRSKY
ALPHAPATENT ASSOCIATES LTD.
55 REUVEN ST.
BELT SHEMENH, 99544
ISRAEL

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 1657-PC	Date of Mailing (day/month/year) 18 JUL 2008
International application No. PCT/IL07/00832	International filing date (day/month/year) 04 July 2007 (04.07.2007)
Applicant SMART MEDICAL SYSTEMS LTD.	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34, chemin des Colombettes
1211 Geneva 20, Switzerland. Facsimile No.: (41-22) 318.82.70.

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(e) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 bis.1 and 90 bis.2, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 20 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Linda C. Dvorak  Telephone No. 571-272-3700 
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Form PCT/ISA/220 (April 2002)

(See notes on accompanying sheet)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 1637-PC	FOR FURTHER ACTION	See Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 2 below
International application No. PCT/IL07/00812	International filing date (day/month/year) 04 July 2007 (04.07.2007)	(Earliest) Priority Date (day/month/year) 06 July 2006 (06.07.2006)
Applicant SMART MEDICAL SYSTEMS LTD.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☒ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 35.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 1A.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL07/00832

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61B 1/00(2006.01), 1/04(2006.01)
A61B 1/00(2006.01), 1/04(2006.01), 1/06(2006.01)

USPC: 900/106, 114, 121, 122, 123, 124, 125, 129, 153, 175

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

I.N. : 900/106, 114, 121, 122, 123, 124, 125, 129, 153, 175

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

(Electronic data base consulted during the international search (name of data base and, where practicable, search terms used))
USPAT, US-PGPUB, USOCR, EPO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,646,722 (Silverstein et al.) 03 March 1987 (03.03.1987), see entire document	1-7 and 11
Y	US 4,807,593 (Bo) 26 Feb. 1989 (28.02.1989), cols. 3-4, lines 1-68	9, 10
X	US 5,050,553 (Takahashi) 24 Sep. 1991 (24.09.1991), col. 2, lines 58-68, cols. 3-4, lines 1-68, fig. 1)	12-21
Y	US 5,670,110 (Hamazaki) 21 Oct. 1997 (21.10.1997), col. 19, lines 34-53)	5, 22

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier application or patent published on or after the international filing date
- "C" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "C1" document referring to an oral disclosure, e.g., exhibition or other means
- "C2" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step where the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step where the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "Z" document member of the same patent family

Date of the actual completion of the international search

17 June 2008 (17.06.2008)

Date of mailing of the international search report

18 JUL 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner of Patents
P.O. Box 1430
Alexandria, Virginia 22302-1430

Facsimile No. (571) 273-3201

Authorized officer

Linda C. Dronik
Telephone No. 571-273-3700

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
DANIEL J. SWIRSKY
ALPHA PATENT ASSOCIATES LTD.
35 REUVEN ST.
BELT SHEMESH, 99544
ISRAEL

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year) 18 JUL 2008		
FOR FURTHER ACTION See paragraph 2 below		
Applicant's or agent's file reference 1657-PC		
International application No. PCT/IL07/06832	International filing date (day/month/year) 04 July 2007 (04.07.2007)	Priority date (day/month/year) 06 July 2006 (06.07.2006)
International Patent Classification (IPC) or both national classification and IPC IPC: A61B 1/00(2006.01), 1/04(2006.01) A61B 1/06(2006.01) USPC: 600/106, 114, 121, 122, 123, 124, 125, 129, 131, 133, 175		
Applicant SMART MEDICAL SYSTEMS LTD.		

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1(b)(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commission for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 17 June 2008 (17.06.2008)	Authorized officer Linda C Dvorak Telephone No. 571-272-3705
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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL07/09832

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43b.1(a)).
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ as disclosed in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IL07/00832

Box No. V Reasoned statement under Rule 43 bis 1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims NONE YES

Claims 1-7, 12-21 NO

Inventive step (IS)

Claims NONE YES

Claims 1-22 NO

Industrial applicability (IA)

Claims 1-22 YES

Claims NONE NO

2. Citations and explanations:

Please See Continuation Sheet

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IL87/00832

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-7 and 11 lack novelty under PCT Article 33(2) as being anticipated by Silverstein 4,646,722. Silverstein discloses an endoscope insertion assembly for performing endoscopy, comprising, an endoscope insertion tube 140 operative for passage through a body cavity, and an optical assembly 12 operative for inspection of said body cavity, said optical assembly 12 being selectively insertable within said endoscope insertion tube 140 (fig. 1, col. 10, lines 34-43), wherein said optical assembly 12 is selectively detachable from said endoscope insertion tube 140. Silverstein also discloses a coupling element 30 operative for engaging said optical assembly 12 via 48 with said endoscope insertion tube 140, wherein said endoscope insertion tube 140 and said coupling element 30 are operative to isolate said optical assembly 12 from fluids external to said endoscope insertion assembly 140, wherein said coupling element 30 comprises an optical window 32 adapted for inspection by said optical assembly 12 therethrough (col. 6, lines 29-43). Silverstein further discloses a pulling element 48 operative for selectively inserting said optical assembly 30 within said endoscope insertion tube 140, wherein said pulling element 48 is detachably engaged with said coupling element 30 for selectable detachment therefrom. Silverstein also discloses said endoscope insertion tube 140 is generally fluid impermeable (col. 10, lines 34-43).

Claims 12-21 lack novelty under PCT Article 33(2) as being anticipated by Takahashi 5,050,383. Takahashi teaches an endoscope insertion assembly for performing endoscopy, comprising an endoscope insertion tube 10 for passage through a body cavity, and an optical assembly 1 for inspection of said body cavity via 3,4,5, said optical assembly 1 being selectively removable from said endoscope insertion tube 10, wherein said optical assembly 1 is selectively insertable within said endoscope insertion tube 10 (col. 2, lines 53-68, cols. 3-7, lines 1-68, fig. 1). Takahashi also teaches a method for preparing an endoscope insertion assembly for performing endoscopy, comprising providing said endoscope insertion assembly 10 including an endoscope insertion tube 10 operative for passage through a body cavity, and an optical assembly 1 operative for inspection of said body cavity via 3,4,5, and selectively inserting said optical assembly 1 within said endoscope insertion tube 10, inspecting said body cavity via 3,4,5 employing said endoscope insertion assembly 10 (col. 4, lines 20-25), removing said optical assembly 1 from endoscope insertion tube 10 following said inspection, engaging said optical assembly 10 with said endoscope insertion tube 1 by employing a coupling element 11, inspecting said body cavity is performed via an optical window 4,5, isolating said optical assembly 1 from fluids external to said endoscope insertion assembly 10, wherein said inserting is performed by a pulling element 10A operative for selectively inserting said optical assembly 1 within said endoscope insertion tube 10, pulling element 10A is detachably engaged with said coupling element 11 for selectable detachment therefrom.

Claim 8 lacks an inventive step under PCT Article 33(3) as being obvious over Silverstein 4,646,722 in view of Hamazaki 5,679,110. Silverstein discloses the invention as discussed above. However, Silverstein fails to positively disclose a mechanical stopper operative to prevent said optical assembly from being pulled out and forward of said endoscope insertion tube. Hamazaki teaches a mechanical

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IL07/00632

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

stopper 178 (col. 19, lines 34-33) operative to prevent said optical assembly 3 from being pulled out and forward of said endoscope insertion tube 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the device of Silverstein with the above discussed limitations taught by Hamazaki in order to have provided an endoscope cover attaching apparatus capable of attaching an endoscope cover to an endoscope without such a problem that the insertion part of the endoscope gets entangled with a tube of the endoscope cover.

Claim 22 lacks an inventive step under PCT Article 33(3) as being obvious over Takahashi 5,090,585 in view of Hamazaki 5,679,110. Takahashi discloses the invention as discussed above. However, Takahashi fails to disclose preventing said optical assembly from being pulled out and forward of said endoscope insertion tube by employing a mechanical stopper. Hamazaki teaches a mechanical stopper 178 (col. 19, lines 34-33) that prevents an optical assembly 3 from being pulled out and forward of an endoscope insertion tube 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the device of Silverstein with the above discussed limitations taught by Hamazaki in order to have provided an endoscope cover attaching apparatus capable of attaching an endoscope cover to an endoscope without such a problem that the insertion part of the endoscope gets entangled with a tube of the endoscope cover.

Claims 9 and 10 lack an inventive step under PCT Article 33(3) as being obvious over Silverstein 4,646,722 in view of Ho 4,807,593. Silverstein discloses the invention as discussed above. However, Silverstein fails to disclose said endoscope insertion tube further comprises an instrument channel, wherein said endoscope insertion tube is a flexible endoscope insertion tube. Ho teaches a flexible endoscope insertion tube 12 comprising an instrument channel 26 (cols. 3-4, lines 1-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the device of Silverstein with the above discussed limitations as taught by Ho in order to have provided an endoscope guide tube which enables a doctor to successfully treat an affected tubercle within a body cavity, such as a polyp or a varix.